



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>7</sup> : C07D 277/04, 277/08, 277/20, 277/22, 277/28, 277/30, 275/02, 263/30, 263/34, C12Q 1/00		A1	(11) International Publication Number: <b>WO 00/56724</b>  (43) International Publication Date: 28 September 2000 (28.09.00)
(21) International Application Number: PCT/US00/07564  (22) International Filing Date: 22 March 2000 (22.03.00)		(81) Designated States: CA, JP, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(30) Priority Data: 60/125,501 22 March 1999 (22.03.99) US		Published <i>With international search report.</i>	
(71) Applicant (for all designated States except US): THE BOARD OF GOVERNORS FOR HIGHER EDUCATION, STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS [US/US]; 199 Promenade Street, Providence, RI 02908 (US).			
(72) Inventors; and (73) Inventors/Applicants (for US only): MARTIN, Lenore, M. [US/US]; 70 Lower College Road, Kingston, RI 02881 (US). HU, Bi-Huang [US/US]; 70 Lower College Road, Kingston, RI 02881 (US).			
(74) Agents: STEVENS, Richard, L. et al.; Samuels, Gauthier & Stevens, Suite 3300, 225 Franklin Street, Boston, MA 02110 (US).			
(54) Title: OXAZOLE AND THIAZOLE COMBINATORIAL LIBRARIES			
(57) Abstract  This invention provides a novel method for synthesizing an ensemble of peptides that allows for the generation of an unlimited number of antibiotic compounds. More specifically, the method comprises utilizes synthetic heterocyclic amino acids containing thiazole and/or oxazole as building blocks in a solid phase combinatorial synthesis to yield natural and unnatural antibiotic compounds.			